

CORE DESCRIPTION

BLM-23-431

500'-505'

Orejon Andesite

A 60% core sample return from the 500' to 505' interval resulted in actually retrieving a sample from 500' to 503'. The core is a medium gray (N5) to dark gray (N3) porphyritic andesite. The crystalline matrix surrounds white, anhedral plagioclase phenocrysts up to 12 mm in diameter. Clay alteration zones along plagioclase phenocryst/groundmass borders are common. Biotite, chlorite, and epidote phenocrysts (up to 4mm) are common with minor amounts of iron staining present. The core sample is massive in texture with no noticeable flow structures. The rock is hard/dense with no significant matrix permeability observed. This core sample is moderately fractured. The largest fractures are ≈ 1 mm in thickness, calcite filled, occur approximately every 15 cm and dip $\approx 60^\circ$ below horizontal. A second set of smaller (< 1 mm) calcite filled conjugate fractures are noticeable but not as extensive. The larger fractures commonly contain iron staining on both matrix and on subhedral to euhedral calcite grains (up to 4mm in diameter). No significant cavities are observed in this core sample, with the most probable avenue of fluid flow being the larger, calcite filled fractures.